

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number  
**WO 2004/108884 A2**

(51) International Patent Classification<sup>7</sup>: C12N

(21) International Application Number:  
PCT/SE2004/000917

(22) International Filing Date: 10 June 2004 (10.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0301722-5 10 June 2003 (10.06.2003) SE

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(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

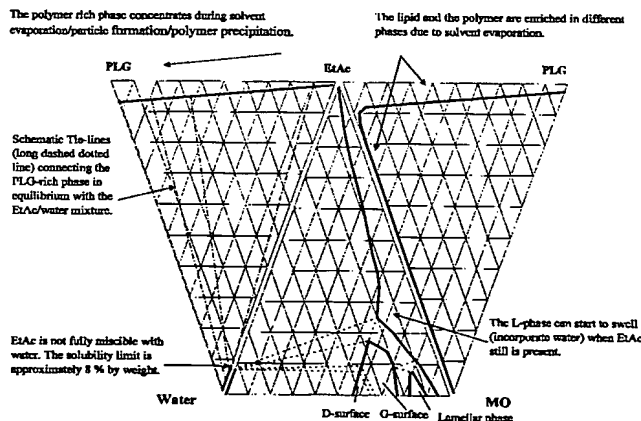
(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished  
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: COMPOSITE MATERIALS AND PARTICLES



(57) Abstract: The invention is a method of making a composite material (from a route given by the phase behavior of a suitable chemical system that is described in a phase diagram), which comprises at least one amphiphilic component and at least one polymer component. It comprises providing a mixture of at least one polymer and at least one amphiphilic compound in a volatile solvent or solvent mixture as well as providing a phase diagram of the chemical system that describes how the components of the chemical system interact in thermodynamic stable phases as a function temperature, concentration and pressure. The polymer should be a homopolymer, a random block copolymer or a mixture thereof, preferably biodegradable. The amphiphilic compound has the ability to form a bilayer-containing phase. The solvent is removed from the mixture by a process selected from the phase diagram in dependence of the final composite material to be achieved, whereby a material is formed, such as liquid extraction against a second solvent, or by spraying. It also relates to the composite material, in particular particles, solid implants, semi-solid, gel-like matrices, useful for applications such as encapsulation of therapeutically active components or surface coating.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number  
**WO 2004/108884 A3**

(51) International Patent Classification<sup>7</sup>: **B01J 13/02**,  
C08J 3/09 // A61K 9/16, 9/52

(21) International Application Number:  
PCT/SE2004/000917

(22) International Filing Date: 10 June 2004 (10.06.2004)

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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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Published:

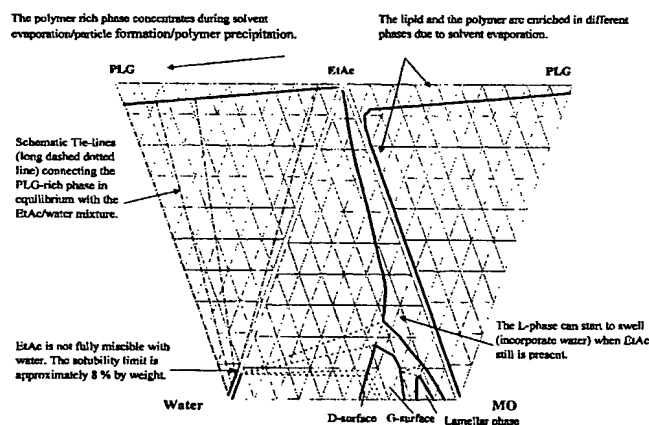
— with international search report

(88) Date of publication of the international search report:  
17 February 2005

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

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